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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MICHAEL JOHN PANTALEANO, BRUCE GORDON FULLER,
ROBERT JOSEPH MCGREEVY, IAN EDWARD TOOKE, KEVIN JOHN
ALBERT, JOHN JOSEPH BAIER, and JAN PINGEL

Appeal 2016-007266
Application 13/781,261
Technology Center 2800

Before CATHERINE Q. TIMM, KAREN M. HASTINGS, and
AVELYN M. ROSS, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the final
rejection of claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

THE INVENTION

Claim 1, reproduced below, is illustrative of the subject matter on
appeal.

1. A method, comprising:

capturing, by a system including a processor, first data from a first plurality of process entities of the industrial process at a first site based on a context setting;

comparing, by the system, the first data to second data from a second plurality of process entities of the industrial process at a second site remote from the first site;

analyzing, by the system, at least one condition of the industrial process at the first site based on the comparing;

performing, by the system and not in response to a user request, at least one tag calculation associated with at least one learned analytic for optimization of the industrial process based upon the analyzing;

determining, by the system, whether the at least one tag calculation shows a return on investment for the optimization of the industrial process; and

in response to the at least one tag calculation showing a return on investment, displaying, by the system on a display device, an offer for at least one subscription to the at least one tag calculation for at least one fee.

Independent claim 8 is directed to a computer system for performing the method of claim 1, and independent claim 15 is directed to a non-transitory computer-readable medium with instructions thereon comparable to claim 1 (Claims App'x).

THE REJECTIONS

The following rejections are before us for review:

1. Claims 1–20 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.
2. Claims 1–20 are rejected under 35 U.S.C. § 112 ¶ 2 as indefinite.

ANALYSIS

We have reviewed each of Appellants' arguments for patentability and definiteness. However, we determine that a preponderance of the evidence supports the Examiner's finding that the claimed invention is unpatentable subject matter as an abstract idea, and that the language of claims 1–20 is indefinite. Accordingly, we AFFIRM the Examiner's §§ 101 and 112 rejections for the reasons set out in the Final Action and Answer. We add the following for emphasis.

The rejection of claims 1–20 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Alice Corp. Pty. Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014), identifies a two-step framework for determining whether claimed subject matter is judicially-excepted from patent eligibility under § 101. According to *Alice* step one, “[w]e must first determine whether the claims at issue are directed to a patent-ineligible concept,” such as an abstract idea. *Alice*, 134 S. Ct. at 2355. As stated in *Enfish, LLC v. Microsoft Corp.*:

[T]he “directed to” inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether “their character as a whole is directed to excluded subject matter.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015); see *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1375, 2016 WL 1393573, at *5 (Fed. Cir. 2016) (inquiring into “the focus of the claimed advance over the prior art”).

Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016). “The ‘abstract idea’ step of the inquiry calls upon us to look at the ‘focus of the

claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *Affinity Labs of Texas v. DirectTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)). “In determining the eligibility of respondents’ claimed process for patent protection under § 101, their claims must be considered as a whole.” *Diamond v. Diehr*, 450 U.S. 175, 188 (1981).

Step two is “a search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Alice*, 134 S. Ct. at 2355 (alteration in original) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)).

Following the two-step analysis, the Examiner determined that the claims are directed toward an algorithm without providing significantly more information particularizing the process steps to another statutory class to make the claim patent-eligible and thus the claims are directed to an abstract idea. Final Act. 3–4. The Appellants challenge the Examiner’s articulation of what the claims are directed to. *See* Br. 14–15. In contrast to the Examiner, Appellants characterize the claims as directed to an improvement over existing computerized technologies. *Id.* Appellants further characterize this improvement as an allowable exception in step two of the analysis. *Id.*

We do not find Appellants’ argument persuasive. Taking claim 1 as representative, it sets out six steps whereby (1) first data from a first plurality of process entities of the industrial process at a first site based on a

context setting is captured by a system including a processor; (2) the first data to second data from a plurality of process entities of the industrial process at a second site remote from the first site are compared by the system; (3) at least one condition of the industrial process at the first site based on the comparing of step 2 is analyzed the system; (4) at least one tag calculation with at least one learned analytic for optimization of the industrial process based upon the analyzing of step 3 is performed by the system; (5) whether the at least one tag calculation shows a return on investment for the optimization for the industrial process is determined by the system; (6) in response to the at least one tag calculation showing a return on investment, an offer for at least one subscription to the at least one tag calculation for at least one fee is displayed by the system on a display device. Overall, the method is a scheme to obtain an optimized return on investment of an industrial process capturing, comparing, determining, analyzing, and performing calculations from data of a plurality of process entities from two remote sites in the process. The claimed steps are directed to optimizing the return on investment of the industrial process. In terms of what they are “directed to,” within the meaning of the § 101 analysis, the other independent claims are no different.

Except for the requirement that they be performed on a “system including a processor,” i.e., a generic computer, the method steps of “capturing,” “comparing,” “analyzing,” “performing,” and “determining,” taken individually are themselves directed to abstract ideas. *Cf. Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1343 (Fed. Cir. 2016) (When “the focus of the asserted claims” is “on collecting information, analyzing it, and

displaying certain results of the collection and analysis,” the claims are directed to an abstract idea). Merely combining these abstract ideas as claimed does not render the combination any less abstract. *Cf. Shortridge v. Found. Constr. Payroll Serv., LLC*, No. 14-CV-04850-JCS, 2015 WL 1739256 (N.D. Cal. Apr. 14, 2015), *aff’d*, No. 2015-1898, 2016 WL 3742816 (Fed. Cir. July 13, 2016). Except for the requirement they be performed on a generic computer, the steps are abstract ideas because, for example, they could be performed through human intelligence alone. “[A]pplication of [only] human intelligence to the solution of practical problems is no more than a claim to a fundamental principle.” *In re Bilski*, 545 F.3d 943, 965 (Fed. Cir. 2008) (en banc), *aff’d*, 130 S. Ct. 3218 (2010) (quotation marks omitted); *see also id.* at 952, 960–61. The Examiner aptly notes the capability of the claimed steps being performed by human intelligence alone. *See* Ans. 7–8.

The Appellants argue that its claims are directed to improvements to an existing technology particularly to a computing and internet-centric environment since the improvements “could not exist *but for the problems of conventional technology systems*,” as was the case with *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). Appeal Br. 15. In *DDR*, the court held that unlike the claims in *Alice*, the “claimed solution amounted to an inventive concept for resolving [a] particular Internet-centric problem, rendering the claims patent-eligible. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1259 (Fed. Cir. 2014). The court stated that the claims in *DDR* were different from those of *Alice* because, unlike the claims of *Alice*, *DDR*’s claims did not “recite a common place business

method aimed at processing business information, applying a known business process to the particular technological environment of the Internet, or creating or altering contractual relations using generic computer functions and conventional network operations.” *Id.* The Examiner distinguishes Appellants’ claims from the claims of *DDR* stating that it is “unclear what particular computerized industrial and business automation centric problem” Appellants’ claims are directed to. Ans. 9. Further, the Examiner argues that the “claims are directed to a generic system that analyze [sic] a generic industrial problem.” *Id.* Appellants make no argument particularly stating what computing or technological system problem the claims are directed to in order to meet the step-two “significantly more” requirement of *Alice*. Asserting that the method described in claim 1 is performed “in a complex, and innovative way,” does not alone elevate the claimed invention above the threshold for patentability. *See* Reply Br. 25–26 (emphasis omitted).

For the foregoing reasons, the Appellants have not shown error in the Examiner’s *Alice* step two determination that the claims do not include an element or combination of elements sufficient to ensure that in practice they amount to significantly more than the ineligible concept itself.

The remaining arguments have been carefully considered but are unpersuasive as to error in the rejection.

The rejection is affirmed.

The rejection of claims 1–20 under 35 U.S.C. § 112 ¶ 2 as indefinite

During prosecution, claims are definite if they “set out and circumscribe a particular area with a reasonable degree of precision and particularity.” *In re Moore*, 439 F.2d 1232, 1235 (CCPA 1971). In

prosecution before the PTO “[i]t is the applicants’ burden to precisely define the invention, not the PTO’s.” *In re Morris*, 127 F.3d 1048, 1056 (Fed. Cir. 1997). The purpose of this requirement is to provide the public with adequate notice of the boundaries of protection involved.

The Examiner found the language of independent claims 1, 8 and 15 indefinite, because each claim requires performing at least one “tag calculation,” but the Specification does not contain any specific definition of this term, or how such a calculation is actually performed (Ans. 3; Spec. *generally*). Appellants provide a publication that defines a tag as an expression that may be simple or complex (Appeal Br. 22), and point out that the Specification describes, e.g., that “attributes of flexible context data is recognized” and the tag is calculated “**based upon the recognized attributes**” (Appeal Br. 23 quoting Spec. 34 (emphasis added in Appeal Br.)).

We do not find these arguments convincing of reversible error. Even assuming *arguendo* that one of ordinary skill in the art understands what a tag is, Appellant does not direct us to any specific disclosure of any calculation (Spec. *generally*).

In light of the virtually unlimited possibilities of calculations (i.e., algorithms) applicable to the claimed expression “tag calculation”, the rejection for indefiniteness is well founded. This situation appears comparable to a lack of disclosure of a specific algorithm for a means plus function limitation. *Cf. Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1337–38 (Fed. Cir. 2008) (an indefiniteness rejection under § 112, second paragraph, is appropriate if the specification discloses

no corresponding algorithm associated with a computer or processor since for a computer-implemented claim limitation interpreted under § 112, sixth paragraph, the corresponding structure must include the algorithm needed to transform the general purpose computer or processor disclosed in the specification into the special purpose computer programmed to perform the disclosed algorithm. *Cf. also, Blackboard, Inc. v. Desire2Learn Inc.*, 574 F.3d 1371, 1384 (Fed. Cir. 2009) (simply reciting the claimed function in the specification, while saying nothing about how the computer or processor ensures that those functions are performed, is not a sufficient disclosure for an algorithm which, by definition, must contain a sequence of steps).

Thus we agree with the Examiner that Appellants' Specification descriptions of a tag calculation do not sufficiently describe the tag calculation for one to determine the metes or bounds of the claims (Appeal Br. 22–24; Ans. 3).

Accordingly, we affirm the Examiner's § 112, second paragraph rejection of all the claims.

CONCLUSIONS

The rejection of claims 1–20 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is affirmed.

The rejection of claims 1–20 under 35 U.S.C. § 112 ¶ 2 as indefinite is affirmed.

DECISION

The decision of the Examiner to reject claims 1–20 is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED